

**AMENDMENT TO THE GUIDELINES FOR THE AWARD OF MONITORING
INITIATIVE FUNDS UNDER SECTION 106 GRANTS TO STATES, INTERSTATE
AGENCIES, AND TRIBES**

QUESTIONS AND ANSWERS

1. Why is EPA amending the guidelines on the allocation and use of the \$18.5 million monitoring initiative funds under section 106 grants?

The guidelines were first issued on March 29, 2006 to implement the regulatory change to 40 CFR 35.162, Allotment Formula for Clean Water Act (CWA) section 106 Funds, published in the *Federal Register* on January 3, 2006. The regulatory change and these guidelines responded to Administration and Congressional directives, under the appropriations process, that call for improved water monitoring and reporting. The President's FY 2005 through FY 2009 budgets requested new funds for section 106 grants specifically for improving statistically-valid water quality monitoring programs to provide information for decision makers and the public. Congress appropriated a total of \$18.5 million for this monitoring initiative.

The guidelines described the formula necessary for EPA to allot CWA section 106 water pollution control program grant funds that have been targeted in EPA's appropriation process to support enhanced monitoring efforts by states, interstate agencies, and tribes for FY 2006 and beyond. The guidelines also describe the specific activities that states, interstate agencies, and tribes must carry out under the monitoring initiative in order to receive the funds. These activities will improve state and tribal capacity to monitor and report on water quality, and include two components: implementation of comprehensive monitoring strategies, including building capacity for state-scale statistically-valid surveys of water condition; and collaboration on statistically-valid surveys of the nation's waters (the National Aquatic Resource Surveys).

The amendment aims to accelerate the use of state-scale statistical surveys as called for in the President's budget requests by incorporating a performance-based standard into the allotment of the section 106 Monitoring Initiative funds. Monitoring Initiative funds will continue to be used for building state monitoring program capacity according to the guidelines set out in March 2006, as long as states make progress in adopting state-scale statistically-valid surveys as part of their state monitoring programs

2. Why is water quality monitoring so critical?

Numerous reports identify the need to improve water quality monitoring and analysis. The Government Accountability Office reported in 2000 that EPA and states cannot make statistically-valid assessments of water quality and lack data to support key management decisions. In 2001, the National Research Council recommended that EPA and states promote a uniform, consistent approach to ambient monitoring and data collection to support core water quality programs. In 2002, the Heinz Foundation issued its *The State of the Nation's Ecosystems*. A primary conclusion of this report was that the data necessary for comprehensive and periodic compilations of the state of the nation's waters does not exist. The report found that there is inadequate data for national reporting on fresh, coastal and ocean water quality

indicators.

The Draft Report on the Environment issued by EPA in 2003 found that there is not sufficient information to provide a national answer, with confidence and scientific credibility, to the question, 'What is the condition of U.S. waters and watersheds?'

Section 106(e) of the CWA recognizes that water monitoring is the foundation for clean water program implementation by making an adequate state monitoring program the prerequisite for obtaining a section 106 grant. Without scientifically defensible water monitoring, the nation and the states cannot understand the extent of pollution, target programs to the highest priority areas, and determine the effectiveness of investments in those programs.

3. What is the relevance of statistically-valid surveys to other EPA efforts?

EPA believes it is critical to have scientifically-valid information on the quality of the nation's waters, and is therefore committed to supporting statistically-based probability surveys. The Council on Environmental Quality's recent announcement of an initiative to develop National Environmental Status and Trend (NEST) indicators is a further example of the national commitment to gathering scientifically-valid environmental information. The first pilot under NEST will focus on water issues. Experience gained through the state-EPA collaboration on the National Aquatic Resource Surveys will help inform this effort.

4. Why isn't the current allotment formula for the base section 106 grants being used to disburse the Monitoring Initiative funds?

Congress and the Administration recognized the need to address shortcomings in the nation's monitoring programs. If the allocation formula used to distribute the section 106 base funds is used to distribute the monitoring initiative funds, some states would receive very few additional funds to implement enhancements to their monitoring programs. Because of the numerous reports on the inadequacy of water monitoring data, as well as questions about EPA's and the states' ability to provide scientifically defensible reports on water condition, the \$18.5 million monitoring initiative funds are allocated using a different formula. The section 106 base funds will continue to be allotted in accordance with the applicable allotment formula used by the Agency.

The monitoring initiative has two components: the first is approximately \$10 million to be used by states, tribes, territories and interstate organizations to implement their monitoring strategies and build monitoring program capacity; and the second is approximately \$8.5 million to establish a fund for surveying water quality condition nationwide.

The funds for the first component, building monitoring program capacity, are being allotted equally. Each state will receive \$169,900, and each territory and the District of Columbia \$84,950. The tribes and interstate organizations will also receive a base amount. The method for allotment of these funds was reached through agreements with the Association of State and Interstate Water Pollution Control Administrators after the enactment of the FY 2005 appropriation. The rationale is that if the funds were allotted using the base state formula, the

majority of states would not receive a sufficient increase to begin implementation of their monitoring strategies.

The second component of the monitoring initiative involves collaboration on surveys to obtain statistically-valid reports on the condition of waters and the extent of pollution nationwide. The allotment of these funds will be tailored to the water resource type being surveyed, i.e., coastal waters, streams, lakes, rivers, and wetlands, and the number of sample sites needed within each jurisdiction. For example, in the contiguous 48 states, a state or tribe will receive funding for each sampling site falling within its jurisdiction. A separate fund of \$450,000 will be used to support survey work in Alaska, Hawaii, Puerto Rico and the trust territories over time. If a grant recipient is able to sample the sites needed for its participation in a nationwide survey for less than the per site funding amount, the remaining funds must be used for implementation of its monitoring strategy and to build capacity for state-scale statistically-valid surveys. If a state does not apply for funds or meet the workplan criteria in these guidelines to implement its strategy and/or complete the survey, including requesting in-kind assistance, EPA may withhold the funds allotted for this purpose and award the funds to any eligible recipient in the region, including another agency of the same state or an Indian tribe/tribal consortium for the same environmental program (40 CFR 35.117).

5. What are the ways in which states and tribes can collaborate on the statistically-valid surveys?

State and tribal water quality programs may use the CWA section 106 survey funds to accomplish activities needed for the surveys in a number of ways: implementing the survey directly; providing the funds to other organizations within the state through interagency agreement; issuing grants and/or contracts; and/or requesting EPA provide in-kind services consisting of EPA contractor support to perform the survey implementation activities on behalf of the state or tribe. In addition, states and territories shape the design of the surveys through consultation during the development of the surveys for each water body type.

6. How do statistically-valid surveys of water condition nationwide benefit state and tribal clean water programs?

The first component of the monitoring initiative will strengthen state and tribal monitoring programs consistent with priorities contained in their comprehensive monitoring strategies, including building state biological monitoring programs and capabilities for undertaking state-scale statistical surveys. The second component will contribute to this capacity-building and produce a statistically-valid survey of water condition at nationwide and regional scales.

States have traditionally monitored only a small percentage of all the nation's waters: approximately 20% of streams and rivers, 40% of lakes, and 35% of estuarine waters. They have used a site-specific, targeted monitoring approach to generally focus limited monitoring resources on heavily used or problem waters. The waters monitored may not reflect conditions in state waters as a whole. In addition, states often monitor a different set of waters from cycle to cycle. These targeted assessments, while providing important site-specific information, don't fully meet the intent of the section 305(b) requirement for a state report on the

extent of their waters meeting the fishable and swimmable goals of the CWA. Statistically-valid surveys offer a cost-effective and efficient way to fulfill these requirements, complement traditional monitoring designs, and support a broader range of management decisions. There is widespread acceptance of the use of statistical surveys in reports on the nation's housing, labor, health, agricultural, and other sectors.

Statistical surveys can result in significant cost savings over the more traditional, census-based monitoring design because far fewer measurements are needed in order to characterize the condition of the resource. Surveys are a cost-effective means of determining trends over time, and identifying waters in which follow-up monitoring may be needed to determine if further protection or restoration efforts are necessary. Data gathered through the national/regional scale surveys could be used to support water quality criteria development and to identify the extent to which emerging pollutants may be of concern. Survey data may be used for developing state-scale predictive tools, documenting the performance of monitoring methods, and assessing the comparability of data.

7. Isn't this funding approach a departure from the Performance Partnership Agreement process for 106 grants? Why does EPA have to know what state and tribal activities are being implemented with the monitoring initiative funds?

This approach is in response to specific needs identified by the Administration and Congress. The Office of Management and Budget reviewed the Clean Water Act's surface water and section 106 programs under its Performance Assessment Rating Tool (PART), and recommended increased accountability for funding, links to program performance, and measurement of environmental outcomes. The Congressional appropriations committee is also asking for increased funding accountability. Therefore, EPA is calling for separate annual 106 workplans to be negotiated between the appropriate EPA Regional office and the state regarding the use of these funds.

8. How will EPA implement the performance-based standard in the allotment of the section 106 Monitoring Initiative funds?

Monitoring Initiative funds will continue to be used for building state monitoring program capacity. However, for the subset of states that are not implementing state-scale surveys, five states each year will need to adopt state-scale statistically-valid surveys as part of their state monitoring programs. During FY 2007, 30 states were implementing, as part of their monitoring network, statistical surveys at the state-scale for at least one water resource type. This number serves as the baseline for the performance-based standard.

If this standard is not met, a portion of the monitoring capacity building funds of those states not implementing state-scale surveys will be reduced beginning with the allotment of FY 2009 Monitoring Initiative funds. For every state below the target of five additional states each year (i.e., 35 states in 2008, 40 in 2009, 45 in 2010, and 50 in 2011), 20% of the Monitoring Initiative funds used for building monitoring capacity (100% equals \$169,900 per state) will be reallocated among those states implementing state-scale statistical surveys.

- For example, if only three additional states adopt the use of statistical surveys by the end

of FY 2008 (for a total of 33 states, two states short of the goal of five additional states), 40% of the capacity building funds (i.e., \$67,960 per state*) of the 17 states not implementing statistical surveys will be evenly reallocated in FY 2009 to the 33 states that are implementing such surveys (i.e., \$35,009 per state*).

9. How much does it cost to implement a state-scale statistical survey?

Approximately 50 sampling sites are needed to implement a state-scale survey, and the costs for sampling and laboratory analysis vary depending upon the state and the water type being sampled. They may range from \$2,000 to \$6,000 per site. If a state chooses to use a rotating basin or watershed approach and sample 10 sites each year over a five year period, the annual costs would range from \$20,000 to \$60,000.

10. How will EPA determine if a state is including statistical surveys as a component of its monitoring program?

At the end of each fiscal year beginning in FY 2008, a state must submit a certification to EPA that the state is implementing a state-scale statistically-valid survey meeting the criteria set out below. EPA, through Headquarters' and Regional Monitoring Coordinators' consultation, will make a determination on the status of state implementation of state-scale statistical surveys based on the state's certification and adherence to the following criteria:

- a. State is implementing a statistical survey design that provides condition estimates for a population of waters (e.g., streams, rivers, lakes, coastal waters, wetlands) of the state based on an unbiased, representative sample of a subset of those waters.
 - i. The state assesses water quality conditions using core indicators for at least one designated use consistent with the *Elements of a State Water Monitoring and Assessment Program* guidance. Over time, state surveys incorporate a full suite of appropriate biological, chemical and physical indicators as described in the guidance. Initial statistically-valid, probability surveys (through 2012), however, may be based on a subset of indicators tailored to specific water quality issues (e.g., biological integrity, recreation, fish consumption, etc.).
 - ii. The implementation of a state-scale statistically-valid survey may span several years. A state may use a rotating basin approach and survey different watersheds over time, or spread the sites required across the state over multiple years -- as long as these surveys can be aggregated for a state-scale survey. For example, a state may choose to sample 10 sites each year over a five year period.
 - iii. States may use methods and protocols employed in the national surveys, or state methods.
 - iv. State surveys aim to achieve 90% confidence +/- 10%. This typically requires about 50 sites.

* These amounts assume the same level of funding as specified in Section IIIA1 of the Monitoring Initiative Guidelines.

- v. Surveys assess at least one water type (streams, lakes, rivers, coastal waters or wetlands).
 - vi. A state's monitoring strategy indicates a commitment to continuing statewide statistical surveys as a component of their comprehensive monitoring program.
- b. State continues to participate in the national/regional scale surveys, unless the state-scale survey is fully consistent with national survey design and methods.
 - c. State reports the results of the state-scale survey by 2012, preferably as a component of the state's Integrated Report/305b/303d (narrative form) and/or in the probability survey module of the Assessment Database. (EPA will modify this module to accommodate state assessment categories, e.g., good/fair/poor, biocondition gradient levels, etc.).
- (Note: EPA acknowledges that because of the unique nature of its land and waters, the State of Alaska may take longer to meet the above criteria.)

11. How were these guidelines developed?

EPA consulted with states and interstate organizations in the development of these guidelines beginning in March 2004. EPA reached an understanding with the Association of State and Interstate Water Pollution Control Administrators (ASIWPCA) on the distribution of the monitoring initiative increment in the FY 2005 section 106 grant funds. EPA continued discussions with ASIWPCA about the monitoring increment grant funds, including use of the FY 2006 increment for statistically-valid surveys of the nation's waters. EPA also consulted with state environmental commissioners through the Environmental Council of the States.

Beginning in November 2007, EPA consulted with states and interstate organizations in the development of this amendment through conference calls with a workgroup composed of representatives of ASIWPCA.

12. Who is affected by this amendment?

40 CFR 35.162 applies to all states and interstate agencies that are eligible to receive grants under Section 106 of the CWA.

13. How can I obtain more information?

For further information, visit the Water Pollution Control Program Grants webpage at <http://www.epa.gov/owm/cwfinance/pollutioncontrol.htm> or the Monitoring and Assessing Water Quality webpage at <http://www.epa.gov/owow/monitoring/>. You may also contact Joan Warren with the Office of Wetlands, Oceans, and Watersheds at (202) 566-1215 or warren.joan@epa.gov, or Robyn Delehanty, U.S. EPA, Office of Wastewater Management, at (202) 564-3880 or delehanty.robyn@epa.gov.